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HALIYUR, VENKATESH N				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/693,037

**Applicant(s)**

JAIN ET AL.

**Examiner**

VENKATESH HALIYUR

**Art Unit**

2419

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01/08/2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-70 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 24-33, 63-66, 69 and 70 is/are allowed.
- 6) ☒ Claim(s) 1, 3-9, 11-16, 18-20, 22-23, 34, 36-42, 44-49, 51-53, 55-62, 67-68 is/are rejected.
- 7) ☒ Claim(s) 2, 10, 17, 21, 35, 43, 50 and 54 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-848)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/08/2009 has been entered.
2. The amendment filed on 01/08/2009 is insufficient to overcome the references 1, 3-9, 11-16, 18-20, 22-23, 34, 36-42, 44-49, 51-53, 55-62, 67-68. Rejection follows.
3. Claims 1-70 is pending in the application. Claims 61-70 are new.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3-9, 11-15, 34, 36-42, 44-48, 57-58, 61-62, 67-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kadambi et al [US Pat: 7,212,534] and Erimli et al further in view of Liu et al [US Pat: 7,292,572].

Regarding claims 1, 34, Kadambi et al in the invention of "Flow Based Congestion Control" disclosed a method (**Figs 10 to 17**) comprising: determining a present need to pause traffic flow to a network device, the traffic flow comprising one or more digital data packets (**flow of data through a network device to be halted or not, col 2, lines 57-67**), each of the one or more digital data packets including a priority level, the priority level indicating a relative level of importance (**based on priority of data**) of timely deliver of the digital data packet to the network device (**priority based selective flow control, Fig 13, col 12, lines 29-55**); and responsive to determining, placing in a type/length field in a frame, a value signifying that the frame indicates that traffic flow to the network device should be paused (**LENGTH/TYPE Field of Fig 17, col 15, lines 11-23**); placing in an opcode field in the frame, a value signifying that traffic flow to the network device should be paused or not paused according to its priority level (**col 15, lines 24-59**); creating a priority mask field in the frame (**OPCODE 1\_3 field of Fig 16**); and placing in the priority mask field, a value signifying which priority levels should be paused (**PRIORITY\_BITMAP field of Fig 16, col 14, lines 41-46**). Kadambi et al disclosed that the traffic flow to the network device should be paused for a specified period of time when the priority indication in the frame type/length field indicates a pause operation (**col 15, lines 11-23**), but fails to positively disclose placing in the priority mask field, a value signifying which priority levels should be paused. However,

Erimli et al disclosed a method for placing priority value signifying which priority levels should be paused in the type/length field (**low and high priority values to control the traffic to the station, col 13, lines 5-40, Fig 5A/B**). Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention was made to use the method of placing priority value signifying which priority levels should be paused in the type/length field as taught by Erimli et al in the system of Kadambi et al to create a priority mask field in the frame and placing in the priority mask field, a value signifying which priority levels should be paused.

Kadambi and Erimli et al disclosed the traffic flow control using pause frame but fails to positively disclose a method to create a priority mask field in the pause frame. However, Liu et al disclosed a method of generating and identifying mask field in the pause frame using mask registers (**mask fields, Figs 1 & 9, col 3, lines 27-54, col 6, lines 64-67, col 7, lines 1-23**). Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention was made to use the method of generating mask field in the pause frame as taught by Liu et al in the system of Kadambi et al as modified by Erimli et al to create a priority mask field in the frame to signify whether a data stream of a particular priority should be paused or not. One is motivated as such in order to provide a dynamic traffic flow control in the network device by either pausing or allowing a data stream of certain priority level indicated in the opcode field of the pause frame.

Regarding claim 3, 36, Kadambi et al disclosed wherein the placing in an opcode field in the frame includes placing a value signifying that traffic flow to the

network device should be paused or not paused according to its priority level (**inhibit or allow transmission of frames, col 15, lines 19-35**), and that the pausing will be for times corresponding to each priority level indicated by a pause time field, in an opcode field in the frame if it is not desired to use the same pause time for each priority level (**col 3, lines 41-52**).

Regarding claim 4, 37 Kadambi et al disclosed placing a separate value for each possible priority level in the pause time field, said separate value indicating an independent pause time for each corresponding priority level (**Figs 14/15, col 13, lines 8-30**).

Regarding claims 5-6, 38-39 wherein the pause time field is equal in size to the pause time field in a standard PAUSE frame multiplied by the number of possible priority levels and wherein the frame is a PAUSE frame (**col 9, lines 32-39**).

Regarding claim 7, 40, Kadambi et al disclosed wherein the value signifying that the frame indicates that traffic flow to the network device should be paused is identical to values used to indicate standard PAUSE frames (**col1 15, lines 11-20**).

Regarding claim 8, 41 Kadambi et al disclosed wherein the value signifying that traffic flow to the network device should be paused or not paused according to its priority level is a value not used by standard PAUSE frames in said opcode field (**col 15, lines 60-67**).

Regarding claim 9, 42, Kadambi et al disclosed a method (**Figs 10 to 17**) comprising: determining a present need to pause traffic flow to a network device, the traffic flow comprising one or more digital data packets (**flow of data through a**

**network device to be halted or not, col 2, lines 57-67)**, each of the one or more digital data packets including a priority level, the priority level indicating a relative level of importance **(based on priority of data)** of timely deliver of the digital data packet to the network device **(priority based selective flow control, Fig 13, col 12, lines 29-55)**; and responsive to the determining, placing in a type/length field in a frame, a value signifying that traffic flow to the network device should be paused or not paused according to its priority level **(LENGTH/TYPE Field of Fig 17, col 15, lines 11-59)**; creating a priority mask field in the frame; and placing in the priority mask field a value signifying which priority levels should be paused **(PRIORITY\_BITMAP field of Fig 16, col 14, lines 41-46)**. Kadambi et al disclosed that the traffic flow to the network device should be paused for a specified period of time when the priority indication in the frame type/length field indicates a pause operation **(col 15, lines 11-23)**, but fails to positively disclose placing in the priority mask field, a value signifying which priority levels should be paused. However, Erimli et al disclosed a method for placing priority value signifying which priority levels should be paused in the type/length field **(low and high priority values to control the traffic to the station, col 13, lines 5-40, Fig 5A/B)**. Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention was made to use the method of placing priority value signifying which priority levels should be paused in the type/length field as taught by Erimli et al in the system of Kadambi et al to create a priority mask field in the frame and placing in the priority mask field, a value signifying which priority levels should be paused.

Kadambi and Erimli et al disclosed the traffic flow control using pause frame but fails to positively disclose a method to create a priority mask field in the pause frame. However, Liu et al disclosed a method of generating and identifying mask field in the pause frame using mask registers (**mask fields, Figs 1 & 9, col 3, lines 27-54, col 6, lines 64-67, col 7, lines 1-23**). Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention was made to use the method of generating mask field in the pause frame as taught by Liu et al in the system of Kadambi et al as modified by Erimli et al to create a priority mask field in the frame to signify whether a data stream of a particular priority should be paused or not. One is motivated as such in order to provide a dynamic traffic flow control in the network device by either pausing or allowing a data stream of certain priority level indicated in the opcode field of the pause frame.

Regarding claim 11, 44, Kadambi et al disclosed placing in an opcode field in the frame, a value signifying that the pausing will be for times corresponding to each priority level indicated by a pause time field if it is desired to use the same pause time for each priority (**col 3, lines 41-52**).

Regarding claim 12, 45, Kadambi et al disclosed placing in the pause time field, a separate value for each possible priority level, the separate value indicating an independent pause time for each corresponding priority level (**Figs 14/15, col 13, lines 8-30**).



Regarding claim 13,46, Kadambi et al disclosed wherein the pause time field is equal in size to the pause time field in a standard PAUSE frame multiplied by the number of possible priorities (**col1 15, lines 11-20**).

Regarding claims 14-15, 47-48, Kadambi et al disclosed wherein the frame is a PAUSE frame and the value signifying that traffic flow to the network device should be paused or not paused according to its priority level is a value not used by standard PAUSE frames in the type/length field (**LENGTH/TYPE Field of Fig 17, col 9, lines 32-39**).

Regarding claims 57,58, Kadambi et al in disclosed a computer program storage device readable by a machine, tangibly embodying a computer program of instructions executable by the computer to perform a method (**Figs 10 to 17**), the method comprising: determining a present need to pause traffic flow to a network device, the traffic flow comprising one or more digital data packets (**flow of data through a network device to be halted or not, col 2, lines 57-67**), each of the one or more digital data packets including a priority level, the priority level indicating a relative level of importance (**based on priority of data**) of timely deliver of the digital data packet to the network device (**priority based selective flow control, Fig 13, col 12, lines 29-55**) and responsive to the determining, placing in a type/length field in a frame, a value signifying that the frame indicates that traffic flow to the network device should be paused (**LENGTH/TYPE Field of Fig 17, col 15, lines 11-23**); placing in an opcode field in the frame, a value signifying that traffic flow to the network device should be paused or not paused according to its priority level (**col 15, lines 24-59**); creating a

priority mask field in the frame (**OPCODE 1\_3 field of Fig 16**); and placing in the priority mask field, a value signifying which priority levels should be paused (**PRIORITY\_BITMAP field of Fig 16, col 14, lines 41-46**). Kadambi et al disclosed that the traffic flow to the network device should be paused for a specified period of time when the priority indication in the frame type/length field indicates a pause operation (**col 15, lines 11-23**), but fails to positively disclose placing in the priority mask field, a value signifying which priority levels should be paused. However, Erimli et al disclosed a method for placing priority value signifying which priority levels should be paused in the type/length field (**low and high priority values to control the traffic to the station, col 13, lines 5-40, Fig 5A/B**). Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention was made to use the method of placing priority value signifying which priority levels should be paused in the type/length field as taught by Erimli et al in the system of Kadambi et al to create a priority mask field in the frame and placing in the priority mask field, a value signifying which priority levels should be paused.

Kadambi and Erimli et al disclosed the traffic flow control using pause frame but fails to positively disclose a method to create a priority mask field in the pause frame. However, Liu et al disclosed a method of generating and identifying mask field in the pause frame using mask registers (**mask fields, Figs 1 & 9, col 3, lines 27-54, col 6, lines 64-67, col 7, lines 1-23**). Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention was made to use the method of generating mask field in the pause frame as taught by Liu et al in the system of

Kadambi et al as modified by Erimli et al to create a priority mask field in the frame to signify whether a data stream of a particular priority should be paused or not. One is motivated as such in order to provide a dynamic traffic flow control in the network device by either pausing or allowing a data stream of certain priority level indicated in the opcode field of the pause frame.

Regarding claims 61,67, Kadambi et al in the invention of "Flow Based Congestion Control" disclosed a method (**Figs 10 to 17**) comprising: determining a present need to pause traffic flow to a network device and responsive to determining, placing in a type/length field in a frame, a value signifying that the frame indicates that traffic flow to the network device should be paused (**LENGTH/TYPE Field of Fig 17, col 15, lines 11-23**); placing in an opcode field in the frame, a value signifying that traffic flow to the network device should be paused or not paused according to its priority level (**col 15, lines 24-59**) and that pausing will be for time indicated by a pause time field in the frame without regard for the priority level if it is desired to use the same pause time for each priority level (**col 3, lines 64-67, col 4, lines 1-8, col 9, lines 27-39, Fig 12**); creating a priority mask field in the frame (**OPCODE 1\_3 field of Fig 16**); and placing in the priority mask field, a value signifying which priority levels should be paused (**PRIORITY\_BITMAP field of Fig 16, col 14, lines 41-46**). Kadambi et al disclosed that the traffic flow to the network device should be paused for a specified period of time when the priority indication in the frame type/length field indicates a pause operation (**col 15, lines 11-23**), but fails to positively disclose placing in the priority mask field, a value signifying which priority levels should be paused. However, Erimli et al disclosed

a method for placing priority value signifying which priority levels should be paused in the type/length field (**low and high priority values to control the traffic to the station, col 13, lines 5-40, Fig 5A/B**). Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention was made to use the method of placing priority value signifying which priority levels should be paused in the type/length field as taught by Erimli et al in the system of Kadambi et al to create a priority mask field in the frame and placing in the priority mask field, a value signifying which priority levels should be paused. Kadambi and Erimli et al disclosed the traffic flow control using pause frame but fails to positively disclose a method to create a priority mask field in the pause frame. However, Liu et al disclosed a method of generating and identifying mask field in the pause frame using mask registers (**mask fields, Figs 1 & 9, col 3, lines 27-54, col 6, lines 64-67, col 7, lines 1-23**). Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention was made to use the method of generating mask field in the pause frame as taught by Liu et al in the system of Kadambi et al as modified by Erimli et al to create a priority mask field in the frame to signify whether a data stream of a particular priority should be paused or not. One is motivated as such in order to provide a dynamic traffic flow control in the network device by either pausing or allowing a data stream of certain priority level indicated in the opcode field of the pause frame.

Regarding claims 62,68, Kadambi et al in the invention of "Flow Based Congestion Control" disclosed a method (**Figs 10 to 17**) comprising: determining a present need to pause traffic flow to a network device and responsive to determining,

placing in a type/length field in a frame, a value signifying that the frame indicates that traffic flow to the network device should be paused (**LENGTH/TYPE Field of Fig 17, col 15, lines 11-23**); placing in an opcode field in the frame, a value signifying that traffic flow to the network device should be paused or not paused according to its priority level (**col 15, lines 24-59**); creating a priority mask field in the frame (**OPCODE 1\_3 field of Fig 16**); and placing in the priority mask field, a value signifying which priority levels should be paused (**PRIORITY\_BITMAP field of Fig 16, col 14, lines 41-46**). Kadambi et al disclosed that the traffic flow to the network device should be paused for a specified period of time when the priority indication in the frame type/length field indicates a pause operation (**col 15, lines 11-23**), but fails to positively disclose placing in the priority mask field, a value signifying which priority levels should be paused. However, Erimli et al disclosed a method for placing priority value signifying which priority levels should be paused in the type/length field (**low and high priority values to control the traffic to the station, col 13, lines 5-40, Fig 5A/B**). Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention was made to use the method of placing priority value signifying which priority levels should be paused in the type/length field as taught by Erimli et al in the system of Kadambi et al to create a priority mask field in the frame and placing in the priority mask field, a value signifying which priority levels should be paused. Kadambi and Erimli et al disclosed the traffic flow control using pause frame but fails to positively disclose a method to create a priority mask field in the pause frame. However, Liu et al disclosed a method of generating and identifying mask field in the pause frame using mask registers

**(mask fields, Figs 1 & 9, col 3, lines 27-54, col 6, lines 64-67, col 7, lines 1-23).**

Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention was made to use the method of generating mask field in the pause frame as taught by Liu et al in the system of Kadambi et al as modified by Erimli et al to create a priority mask field in the frame to signify whether a data stream of a particular priority should be paused or not. One is motivated as such in order to provide a dynamic traffic flow control in the network device by either pausing or allowing a data stream of certain priority level indicated in the opcode field of the pause frame.

6. Claims 16,18-20, 22, 23,49,51-53, 55-56, 59-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Erimli et al and Liu et al[US Pat: 7,292,572] further in view of Kadambi [US Pat: 7,212,534].

Regarding claim 16,49, Erimli et al disclosed a method comprising **(Figs 5A/B):** examining a value in a type/length field in a frame to determine if it signifies that the frame indicates that traffic flow to a network device should be paused **(delay observed to avoid congestion indicated in type/length field of the PAUSE frame, Fig. 5B, col 12, lines 57-67, col 13, lines 1-9)**; examining a value in an opcode field in the frame to determine if it signifies that traffic flow to the network device should be paused or not paused according to its priority level, if value in said the type/length field signified that the frame indicates that traffic flow to the network device should be paused **(pause interval, Fig 5B, col 13, lines 10-29)**; and pausing traffic flow to the network device with priority levels corresponding to levels signified by a value in a priority mask field in

the frame if the value in the opcode field signified that traffic flow to the network device should be paused or not paused according to its priority level and if the value in the type/length field signified that the frame indicates that traffic flow to the network device should be paused (**high and low priority traffic, col 13, lines 30-39**). Erimli et al disclosed examining an opcode field in the frame to determine if it signifies that traffic flow to the network device should be paused or not paused according to its priority level, but fails to positively disclose a priority mask field in the frame signifying a priority level. However, Liu et al disclosed a method of generating and identifying mask field in the pause frame using mask registers (**mask fields, Figs 1 & 9, col 3, lines 27-54, col 6, lines 64-67, col 7, lines 1-23**). Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention was made to use the method of identifying a priority value in the mask field of frame as taught by Liu et al in the system of Erimli et al to identify a priority mask field in the frame to signify whether a data stream of a particular priority should be paused or not. Erimli and Liu failed to disclose the feature of and the traffic flow comprising one or more digital data packets, each of the one or more digital data packets including a priority level, the priority level indicating a relative level of importance of timely deliver of the digital data packet to the network device. However Kadambi disclosed the feature of the traffic flow comprising one or more digital data packets (**flow of data through a network device to be halted or not, col 2, lines 57-67**), each of the one or more digital data packets including a priority level, the priority level indicating a relative level of importance (**based on priority of data**) of timely deliver of the digital data packet to the network device (**priority based**

**selective flow control, Fig 13, col 12, lines 29-55).** Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention was made to use the method of flow control of data through a network device to be halted or not based on priority of data for the timely deliver of the digital data packet to the network device in the system of Erimli et al as modified by Liu et al to include the limitation of traffic flow comprising one or more digital data packets, each of the one or more digital data packets including a priority level, the priority level indicating a relative level of importance of timely deliver of the digital data packet to the network device. One is motivated as such in order to provide a dynamic traffic flow control in the network device by either pausing or allowing a data stream of certain priority level indicated in the opcode field of the pause frame.

Regarding claims 18,51, Erimli et al disclosed wherein the examining a value in an opcode field further comprises examining a value in the opcode field to determine if it also signifies that the pausing will be for times corresponding to each priority level indicated by a pause time **(delay observed to avoid congestion indicated in type/length field of the PAUSE frame, col 12, lines 23-37)** and the pausing traffic flow to the network device with priority levels corresponding to levels signified by a value in a priority mask field in the frame for time periods indicated by a times corresponding to each priority level in a pause time field in the frame if the opcode field signifies that the pausing will be for times corresponding to each priority level indicated by a pause time **(pause interval, Fig 5B, col 13, lines 10-39).** Erimli et al disclosed examining an opcode field in the frame to determine if it signifies that traffic flow to the network device



should be paused or not paused according to its priority level, but fails to positively disclose a priority mask field in the frame signifying a priority level. However, Liu et al disclosed a method of generating and identifying mask field in the pause frame using mask registers (**mask fields, Figs 1 & 9, col 3, lines 27-54, col 6, lines 64-67, col 7, lines 1-23**). Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention was made to use the method of identifying a priority value in the mask field of frame as taught by Liu et al in the system of Erimli et al to identify a priority mask field in the frame to signify whether a data stream of a particular priority should be paused or not. One is motivated as such in order to provide a dynamic traffic flow control in the network device by either pausing or allowing a data stream of certain priority level indicated in the opcode field of the pause frame.

Regarding claim 19, 52, Erimli et al disclosed wherein the times are a separate value for each possible priority level indicating an independent pause time for each corresponding priority level (**col 12, lines 33-39**).

Regarding claim 20, 53, 59-60, Erimli et al disclosed a method comprising (**Figs 5A/B**): means for examining a value in a type/length field in a frame to determine if it signifies that the frame indicates that traffic flow to a network device should be paused (**delay observed to avoid congestion indicated in type/length field of the PAUSE frame, Fig 5B, col 12, lines 57-67, col 13, lines 1-9**) and if it signifies that traffic flow to the network device should be paused or not paused according to its priority level (**low and high priority, col 13, lines 30-39**); the traffic flow comprising one or more digital data packets, each of the one or more digital data packets including a priority level, the

priority level indicating a relative level of importance of timely deliver of the digital data packet to the network device and means for pausing traffic flow to the network device with priority levels corresponding to levels signified by a value in a priority mask field if the frame if the value in the type/length field signified that traffic flow to a network device should be paused and that traffic flow to the network device should be paused or not paused according to its priority level (**pause interval, Figs 5A/B, col 12, lines 23-37, col 13, lines 10-29**). Erimli et al disclosed examining an opcode field in the frame to determine if it signifies that traffic flow to the network device should be paused or not paused according to its priority level, but fails to positively disclose a priority mask field in the frame signifying a priority level. However, Liu et al disclosed a method of generating and identifying mask field in the pause frame using mask registers (**mask fields, Figs 1 & 9, col 3, lines 27-54, col 6, lines 64-67, col 7, lines 1-23**). Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention was made to use the method of identifying a priority value in the mask field of frame as taught by Liu et al in the system of Erimli et al to identify a priority mask field in the frame to signify whether a data stream of a particular priority should be paused or not. Erimli and Liu failed to disclose the feature of and the traffic flow comprising one or more digital data packets, each of the one or more digital data packets including a priority level, the priority level indicating a relative level of importance of timely deliver of the digital data packet to the network device. However Kadambi disclosed the feature of the traffic flow comprising one or more digital data packets (**flow of data through a network device to be halted or not, col 2, lines 57-67**), each of the one or more

digital data packets including a priority level, the priority level indicating a relative level of importance **(based on priority of data)** of timely deliver of the digital data packet to the network device **(priority based selective flow control, Fig 13, col 12, lines 29-55)**. Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention was made to use the method of flow control of data through a network device to be halted or not based on priority of data for the timely deliver of the digital data packet to the network device in the system of Erimli et al as modified by Liu et al to include the limitation of traffic flow comprising one or more digital data packets, each of the one or more digital data packets including a priority level, the priority level indicating a relative level of importance of timely deliver of the digital data packet to the network device. One is motivated as such in order to provide a dynamic traffic flow control in the network device by either pausing or allowing a data stream of certain priority level indicated in the opcode field of the pause frame. One is motivated as such in order to provide a dynamic traffic flow control in the network device by either pausing or allowing a data stream of certain priority level indicated in the opcode field of the pause frame.

Regarding claim 22,55, Erimli et al disclosed examining a value in the type/length field to determine if it also signifies that the pausing will be for times corresponding to each priority level indicated by a pause time **(delay observed to avoid congestion indicated in type/length field of the PAUSE frame, col 12, lines 23-37)**; and wherein the pausing traffic flow further comprises pausing traffic flow to the network device with priority levels corresponding to levels signified by a value in a priority mask field in the

frame for time periods indicated by a times corresponding to each priority level in a pause time field in the frame if the type/length field signifies that the pausing will be for times corresponding to each priority level indicated by a pause time (**pause interval, col 13, lines 10-29**). Erimli et al disclosed examining an opcode field in the frame to determine if it signifies that traffic flow to the network device should be paused or not paused according to its priority level, but fails to positively disclose a priority mask field in the frame signifying a priority level. However, Liu et al disclosed a method of generating and identifying mask field in the pause frame using mask registers (**mask fields, Figs 1 & 9, col 3, lines 27-54, col 6, lines 64-67, col 7, lines 1-23**). Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention was made to use the method of identifying a priority value in the mask field of frame as taught by Liu et al in the system of Erimli et al to identify a priority mask field in the frame to signify whether a data stream of a particular priority should be paused or not. One is motivated as such in order to provide a dynamic traffic flow control in the network device by either pausing or allowing a data stream of certain priority level indicated in the opcode field of the pause frame.

Regarding claim 23, 56, Erimli et al disclosed wherein the times are a separate value for each possible priority level indicating an independent pause time for each corresponding priority level (**col 12, lines 33-37**).

***Response to Amendment***

7. Applicant's argument, see remarks filed on 01/08/2009 with respect to rejection of claims have been considered and is not persuasive for claims 1, 3-9, 11-16, 18-20, 22-23, 34,36-42, 44-49, 51-53, 55-62, 67-68.

With respect to applicant's argument for the claims 1, 3-9, 11-16, 18-20, 22-23, 34,36-42, 44-49, 51-53, 55-62,67-68, Kadambi disclosed the traffic flow to the network device should be paused for a specified period of time when the priority indication in the frame type/length field indicates a pause operation (col 15, lines 11-23) and Kadambi further disclosed the amended feature of determining a present need to pause traffic flow to a network device, the traffic flow comprising one or more digital data packets (flow of data through a network device to be halted or not, col 2, lines 57-67), each of the one or more digital data packets including a priority level, the priority level indicating a relative level of importance (based on priority of data) of timely deliver of the digital data packet to the network device (priority based selective flow control, Fig 13, col 12, lines 29-55); However the examiner agrees that Kadambi et al fails to positively disclose placing in the priority mask field, a value signifying which priority levels should be paused the examiner agrees as. However, Erimli and Liu references disclosed the methods of placing priority value signifying which priority levels should be paused in the type/length field (Erimli et al, col 13, lines 5-40, Fig 5A/B) and for placing in the priority mask field, a value signifying which priority levels should be paused (Liu et al).

***Allowable Subject Matter***

8. Claims 2, 10, 17, 21, 35, 43, 50, 54 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 24-33, 63-66, 69-70 are allowable over prior art.

### ***Conclusion***

9. Any inquiry concerning this communication or earlier communications should be directed to the attention to Venkatesh Haliyur whose phone number is 571-272-8616. The examiner can normally be reached on Monday-Friday from 9:00AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached @ (571)-272-7884. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (571)-272-2600 or fax to 571-273-8300.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you

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have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

/Venkatesh Haliyur/

Examiner, Art Unit 2419

/Edan Orgad/

Supervisory Patent Examiner, Art Unit 2419